

FIG.2

FIGURE 2-0180860

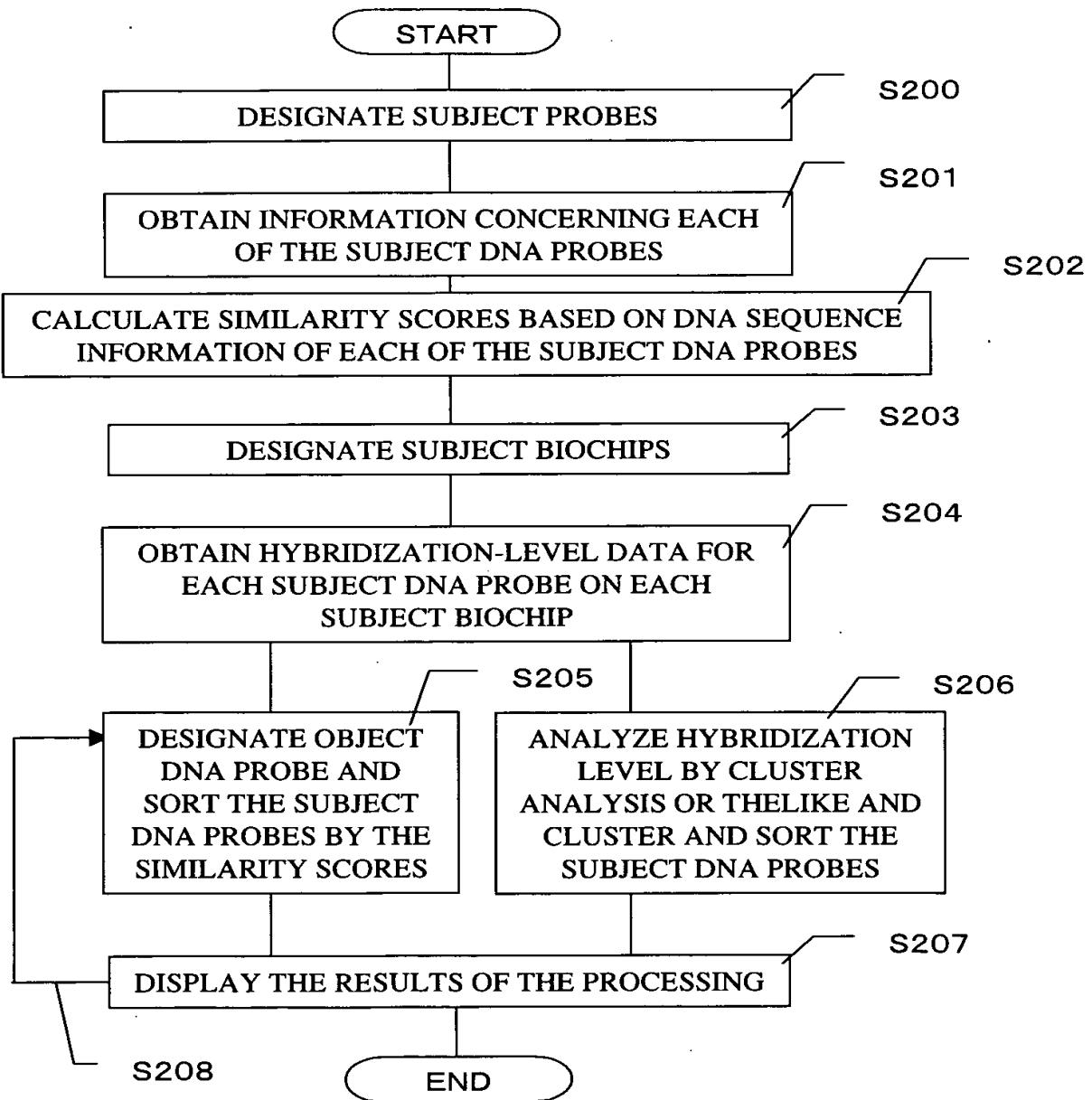


FIG.3

EXAMPLE OF DATA STRUCTURE

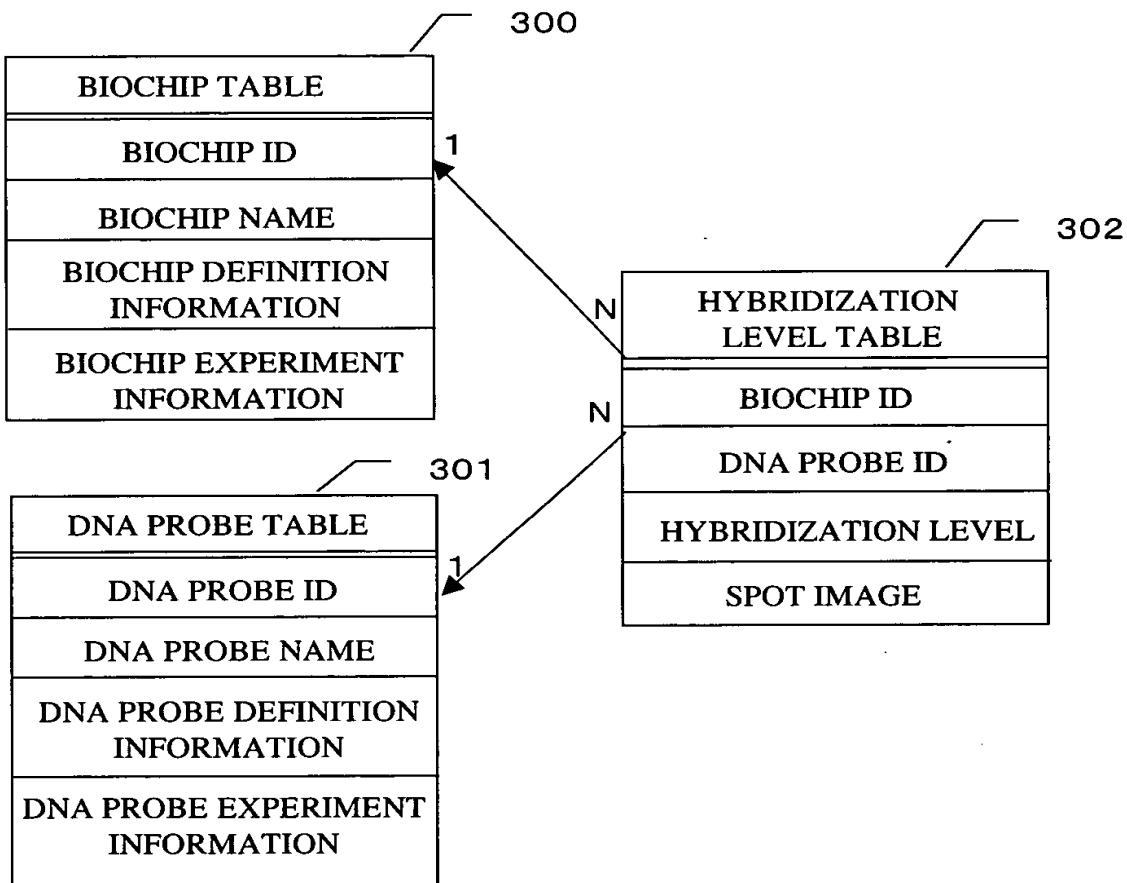


FIG.4

300

EXAMPLE OF BIOCHIP DATA

BIOCHIP ID	BIOCHIP NAME	BIOCHIP DEFINITION INFORMATION	BIOCHIP EXPERIMENT INFORMATION
1	Chip 1	Definition about Chip 1	Sample from the Stage A (1D)
2	Chip 2	Definition about Chip 2	Sample from the Stage B (3D)
3	Chip 3	Definition about Probe 3	Sample from the Stage C (1W)
:	:	:	
n	Chip n	Definition about Chip n	not used.

FIG.5

301

EXAMPLE OF DNA PROBE DATA

DNA PROBE ID	DNA PROBE NAME	DNA PROBE DEFINITION INFORMATION	DNA PROBE SEQUENCE
1	Probe1	Definition about Probe 1	ACGGGACGTTCCCTCGGAGG
2	Probe2	Definition about Probe 2	ACGGGACGTTCCCCGGAGG
3	Probe3	Definition about Probe 3	TTTGGACGTTCCAATAGAGG
4	Probe4	Definition about Probe 4	TTTGGACGTTCCAATAGGGG
5	Probe5	Definition about Probe 5	TTGGGACGTTCCAATAGGAG
:	:	:	:
m	Probe m	Definition about Probe n	TTGGGACGTTCCAATAGGAG

FIG.6

EXAMPLE OF HYBRIDIZATION-LEVEL DATA

302a

BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE
1	1	31,916	
1	2	224	
1	3	41.231	
1	4	24,107	
1	5	9,607	
:	:	:	
1	m	9,753	

302b

BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE
2	1	43,416	
2	2	41,224	
2	3	2,107	
2	4	25,307	
2	5	1,807	
:	:	:	
2	m	853	

302c

BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE
3	1	21,916	
3	2	11,224	
3	3	10,007	
3	4	21,107	
3	5	1,507	
:	:	:	
3	m	5,753	

FIG.7

EXAMPLE OF CALCULATED SIMILARITY SCORES

Target \ Key	Probe1	Probe2	Probe3	Probe4	Probe5
Probe1	80	76	40	56	44
Probe2	76	80	44	52	44
Probe3	40	44	80	36	52
Probe4	56	52	36	80	48
Probe5	44	44	52	48	80

FIG.8

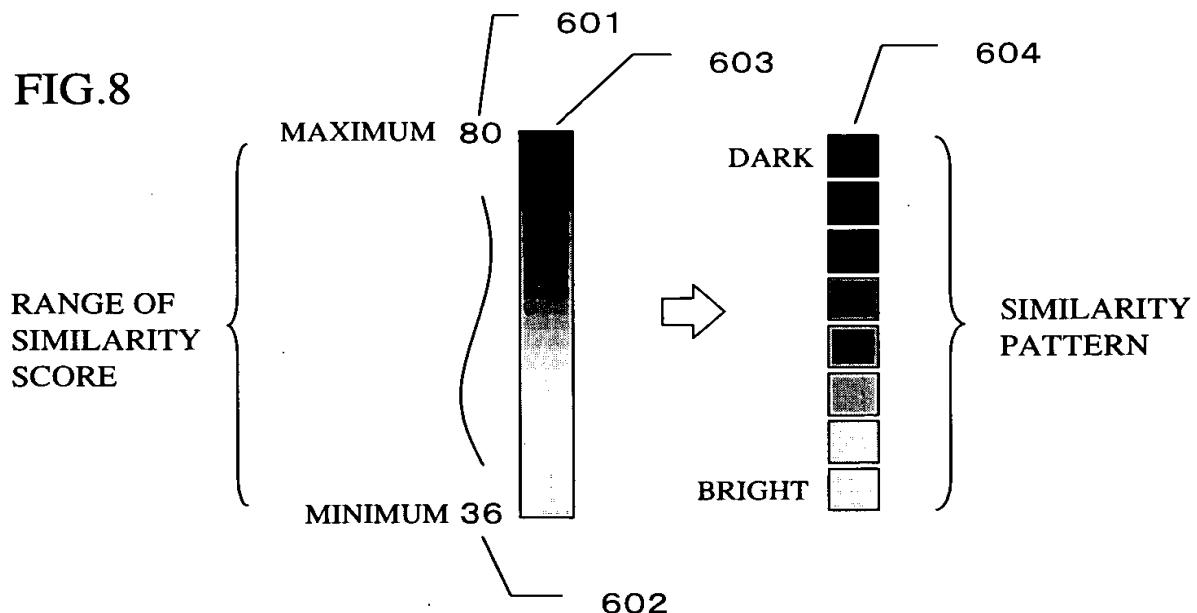


FIG.9

301

DNA PROBE ID	DNA PROBE NAME	DNA PROBE DEFINITION INFORMATION	DNA PROBE SEQUENCE	SIMILARITY SCORE
1	Probe1	Definition about Probe 1	ACGGGACGTTCCCTCGGAGG	80
2	Probe2	Definition about Probe 2	ACGGGACGTTCCCCCGGAGG	76
3	Probe3	Definition about Probe 3	TTTGGACGTTCCAATAGAGG	40
4	Probe4	Definition about Probe 4	TTTGGACGTTCCAATAGGGG	56
5	Probe5	Definition about Probe 5	TTGGGACGTTCCAATAGGAG	44
:	:	:	:	
m	Probe m	Definition about Probe n	TTGGGACGTTCCAATAG...	nn

605

606

SIMILARITY PATTERN

The table 301 contains data for 'm' DNA probes. An arrow labeled '605' points from the table to a vertical column of boxes labeled '606' at the top. This column is divided into two sections: 'SIMILARITY PATTERN' (top) and 'BRIGHT' (bottom). The 'SIMILARITY PATTERN' section contains four solid black boxes. The 'BRIGHT' section contains four boxes: the top one is white, the second is dark gray, the third is light gray, and the bottom one is white. A bracket on the right labeled 'SIMILARITY PATTERN' groups the 'SIMILARITY PATTERN' and 'BRIGHT' sections.

*Similarity score is a similarity score of each of the DNA probes with respect to the DNA probe:ID 1.

FIG.10

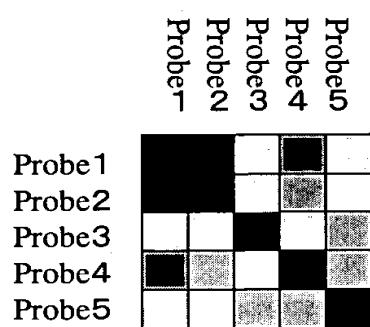


FIG.11

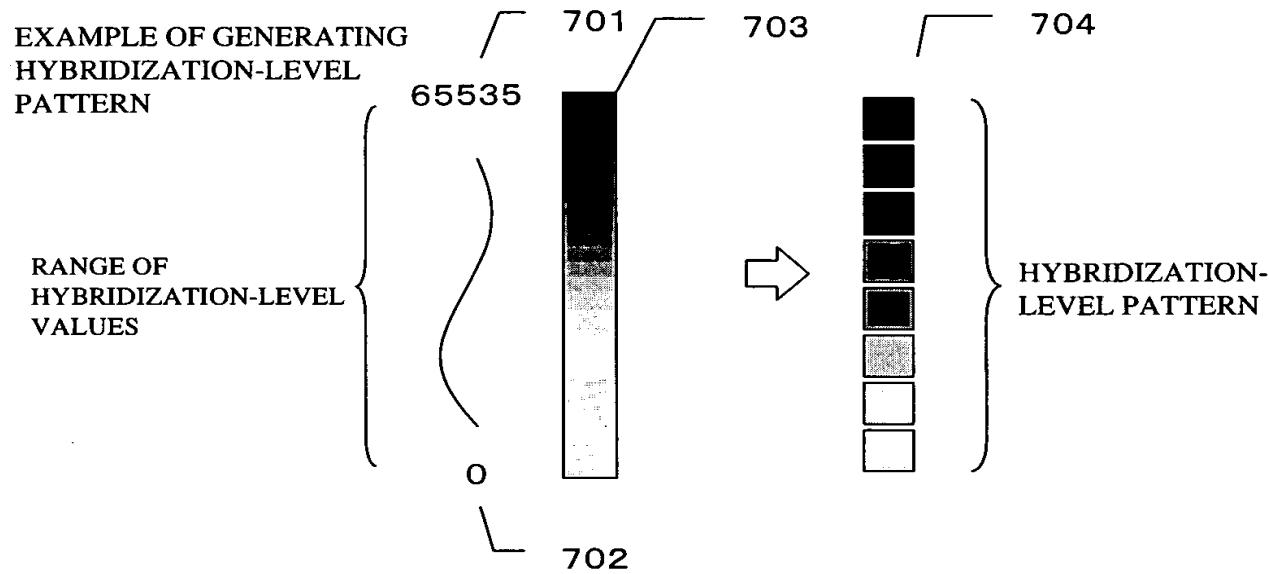


FIG.12

EXAMPLE OF CONVERTING HYBRIDIZATION-LEVEL PATTERN

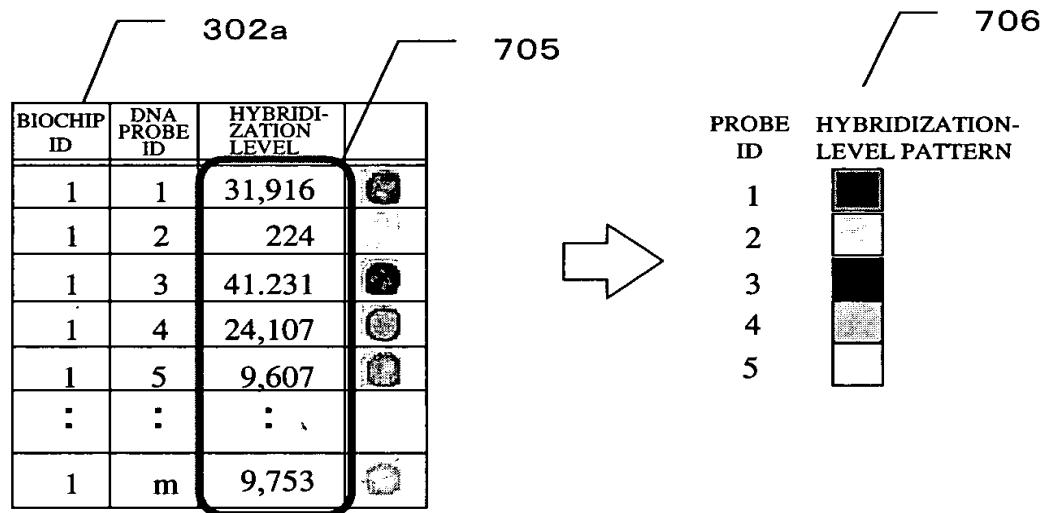


FIG.13

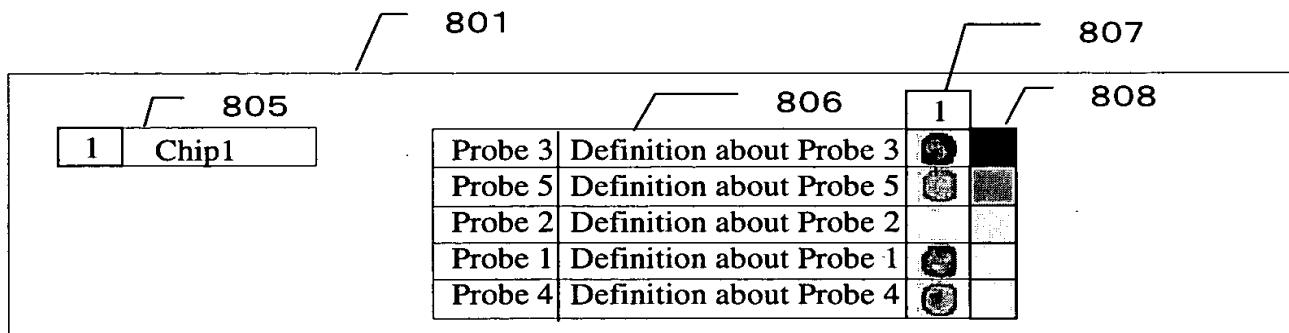


FIG.14

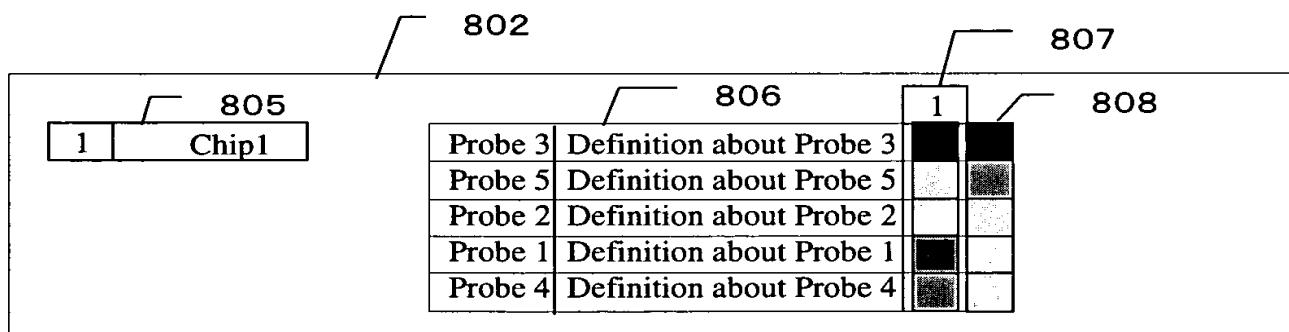


FIG.15

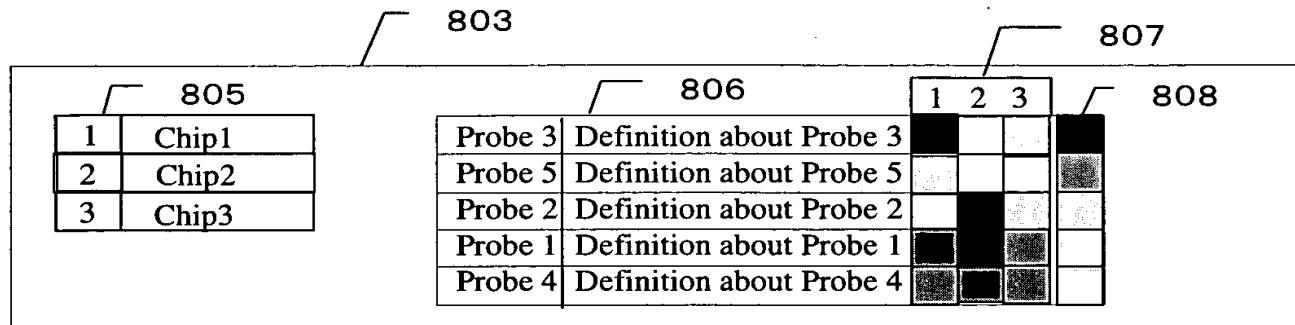


FIG.16

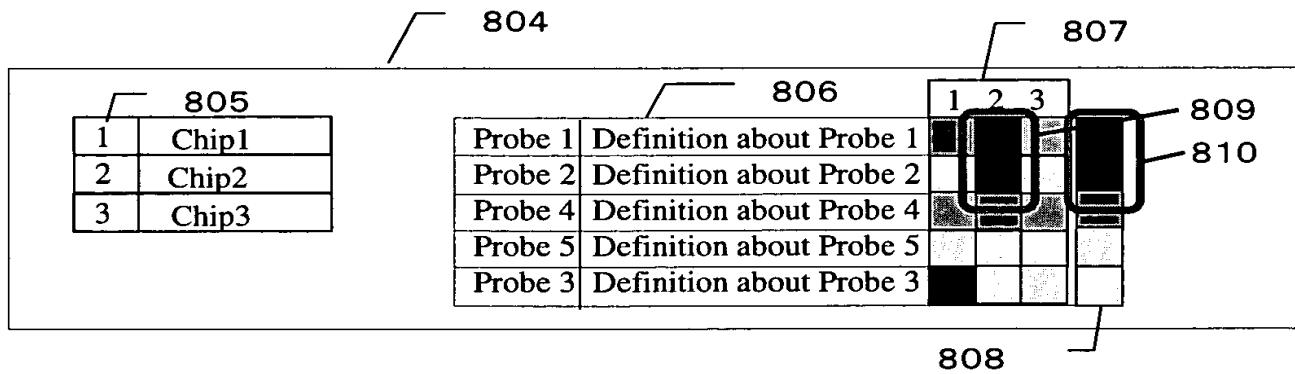


FIG.17

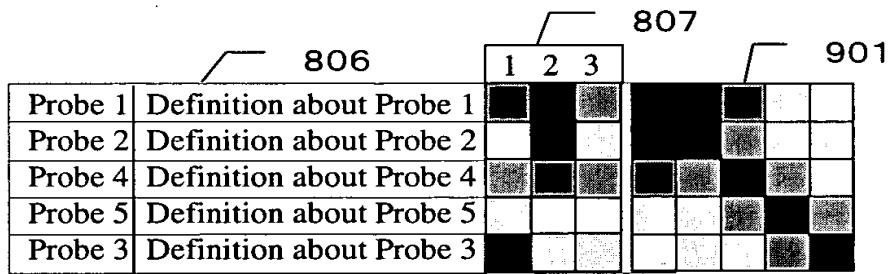


Table 805 defines three chips:

1	Chip1
2	Chip2
3	Chip3

FIG.18

